

BACKGROUND

Hypertension is a leading cause of death in the United States. According to the CDC, 1/3 adults have hypertension, and only about half (54%) have this blood pressure under control. At Vidant's Family Medical Center in Greenville, NC, uncontrolled hypertension is a pressing issue that needs to be addressed. Specifically, in the Buccaneer Module, which has 43.15% (per JNC 7) or 36% (per JNC 8) uncontrolled hypertension rates – the highest of all the modules in the center. In this study, these patients with uncontrolled hypertension were followed to track their blood pressure control and then an intervention was done with a subset population to see if this issue could be improved.

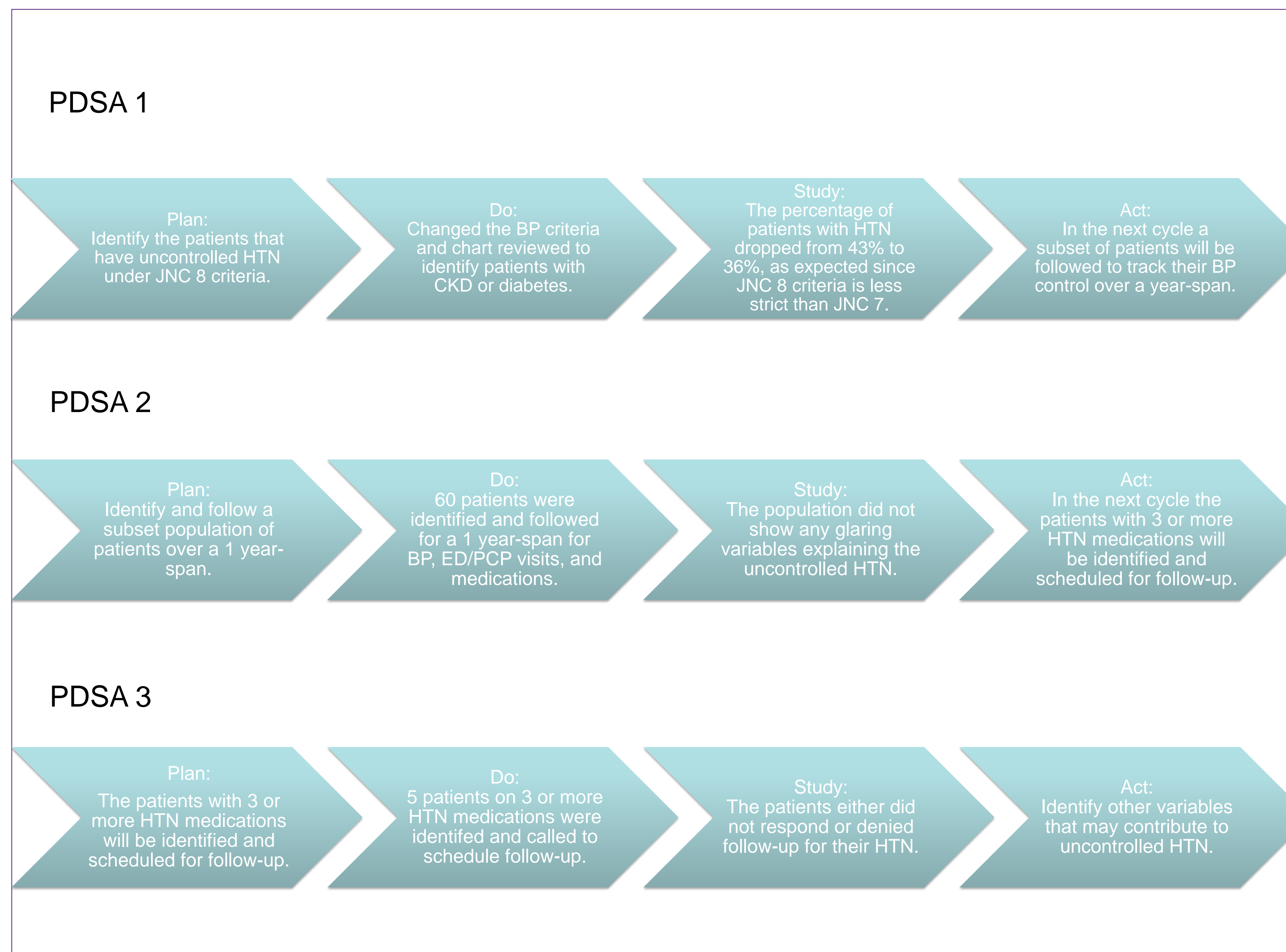
PROJECT AIM

The specific aim of the study is to improve the rates of uncontrolled hypertension in the Buccaneer module at Vidant's Family Medical Center.

PROJECT DESIGN/STRATEGY

All of the patients with uncontrolled hypertension rates per JNC 7 in the Buccaneer Module of the Family Medicine Center were gathered and then were filtered so that only patients with uncontrolled hypertension per JNC 8 were represented. A statistically significant number of charts have been selected randomly and these patients' charts were reviewed and followed throughout a 12-month period and factors such as blood pressures, medications, Emergency Department visits, and PCP visits. Patients that had uncontrolled blood pressure without improvement were identified, and the patients on 3 or more blood pressure medications for control were recognized to set-up a follow-up appointment to discuss possible reasons to poor control and improve their medication regime.

CHANGES MADE (PDSA CYCLES)



RESULTS/OUTCOMES

The Buccaneer module had 1189 patients, of which 513 (43.15%) were said to have uncontrolled hypertension per JNC 7 criteria, and 428 (36.00%) were said to have uncontrolled hypertension per JNC 8 criteria. Of the 428 patients with uncontrolled hypertension, 31.4% of patients greater than or equal 60 years old were uncontrolled and 40.5% that are less than 60 years old were uncontrolled. After choosing a statistically significant number of 60 patients from this population, 8.3% of the patients (5 patients) from the sample were on 3 or more blood pressure medications. One patient scheduled a follow-up for their hypertension, and the rest either could not be contacted or refused a follow-up appointment.

Patient group	JNC 7	JNC 8	2017 ACC/AHA
General	<140/90 mm Hg	<140/90 mm Hg	<130/80 mm Hg*
Older patients	<140/90 mm Hg	<150/90 mm Hg [†]	<130 mm Hg [‡]
Diabetes	<130/80 mm Hg	<140/90 mm Hg	<130/80 mm Hg
Chronic kidney disease	<130/80 mm Hg	<140/90 mm Hg	<130/80 mm Hg

ACC, American College of Cardiology; AHA, American Heart Association; BP, blood pressure; JNC 7, Seventh Report of the Joint National Committee; JNC 8, Eighth Joint National Committee.

*Includes patients with atherosclerotic cardiovascular disease (ASCVD) or an estimated 10-year risk ≥10%, as well as patients needing primary prevention or those with 10-year ASCVD risk <10%.

[†]General population ≥60 years of age. Treatment does not need to be adjusted in patients ≥60 years who may have lower systolic BP (eg, <140 mm Hg) and are not experiencing adverse effects.

[‡]Ambulatory, community-dwelling, noninstitutionalized patients ≥65 years of age. Clinical judgment, patient preference, and a team-based approach to assess benefits and risks are reasonable for patients with a high burden of comorbidity and limited life expectancy.

LESSONS LEARNED

Uncontrolled hypertension is a significant issue leading to a lower quality of living for the patients that are affected by it. These patients with uncontrolled hypertension may have many different contributing factors that are leading to them not being able to resolve or lessen the issue. These factors could be compliance, transportation, lack of access to care, etc. Although uncontrolled hypertension is multifactorial, finding a common and significant cause in the certain population that has this issue in the Buccaneer Module at the Family Medicine Center could help decrease the rates of uncontrolled hypertension.

NEXT STEPS

- Identify other variables that may affect blood pressure control.
- Possibly track which patients have made follow-up appointments and see if any improvements have been made, or if the patient was educated about the implications of blood pressure control.
- Make and distribute brochures about the benefits versus risks in controlled versus uncontrolled hypertension and with advice on how to improve control.
- Set-up a session with the patients with uncontrolled hypertension and a nutritionist to help in adjusting a variable in their diets to begin a healthier lifestyle.

ACKNOWLEDGEMENTS

This poster was prepared with financial support from the American Medical Association (AMA) as part of the Accelerating Change in Medical Education Initiative. The content reflects the views of the authors and does not necessarily represent the views of the AMA or other participants in this initiative.